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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,605	02/14/2006	Peter Legg	CE10327EP	4540

22917	7590	03/26/2007		EXAMINER
MOTOROLA, INC.				SAFAIPOUR, BOBBAK
1303 EAST ALGONQUIN ROAD				
IL01/3RD			ART UNIT	PAPER NUMBER
SCHAUMBURG, IL 60196			2618	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	03/26/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Docketing.Schaumburg@motorola.com
APT099@motorola.com

	Application No.	Applicant(s)
Office Action Summary	10/568,605	LEGG ET AL.
	Examiner	Art Unit
	Bobbak Safaipour	2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>09 January 2007</u>.

2a) ☐ This action is **FINAL.**   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>*1,4-11,13 and 16-21*</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>*1,4-11,13 and 16-21*</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to the rejections of claims 1, 4-11, 13, 16-21 under 35

USC 35 USC § 102 have been fully considered and are persuasive. Therefore, the rejection has

been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in

view of newly found prior art reference.

Claims 2-3, 12, 14-15, 22-25 have been cancelled. **Claims 1, 4-11, 13, 16-21** are now

pending in the application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459

(1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims **1, 4-11, 13, 16-21** rejected under 35 U.S.C. 103(a) as being unpatentable over

Chou et al (US Patent Application Publication #2004/0205752 A1) in view of **Toskala et al**

(United States Patent #6,374,118).

Consider **claim 1**, Chou et al disclose an outer loop power control method performed in a

radio communication system, the method comprising: determining that a plurality of different

services are being communicated (paragraphs 25 and 36; read as principal functions of the RNC

is to process user voice and data traffic and conduct power control); performing a delay tolerance

comparison with respect to the different services (paragraph 7; read as the method assigns the

processor resource of each QoS class according to the ratio of its delay tolerance for each class

of traffic); and selecting the service having the least delay tolerant service (paragraphs 20-31).

Chou et al fail to disclose providing an inner loop power control performance target of

the selected service in a manner dependent upon the delay tolerance comparison.

In related art, Toskala et al discloses providing an inner loop power control performance

target of the selected service (col. 2, lines 19-40; col. 6, line 26 to col. 7, line 13; figures 2a-2b).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

invention to incorporate the inner loop power control performance of Toskala et al into the delay

tolerance comparison of Chou et al to decrease interference and thus increases the amount of

radio capacity available in the system.

Consider **claim 13**, Chou et al disclose an apparatus for performing an outer loop power

control method in a radio communications system, comprising: means for determining that a

plurality of different services are being communicated (paragraphs 25 and 36; read as principal functions of the RNC is to process user voice and data traffic and conduct power control); means for performing a delay tolerance comparison with respect to the different services (paragraph 7; read as the method assigns the processor resource of each QoS class according to the ratio of its delay tolerance for each class of traffic); and means for selecting the service having the least delay tolerant service (paragraphs 5-7, 20-31).

Chou et al fail to disclose means for providing an inner loop power control performance target of the selected service in a manner dependent upon the delay tolerance comparison.

In related art, Toskala et al discloses providing an inner loop power control performance target of the selected service (col. 2, lines 19-40; col. 6, line 26 to col. 7, line 13; figures 2a-2b).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the inner loop power control performance of Toskala et al into the delay tolerance comparison of Chou et al to decrease interference and thus increases the amount of radio capacity available in the system.

Consider **claims 4 and 16**, and **as applied to claims 1 and 13 above, respectively,** Chou et al, as modified by Toskala et al, disclose a method and apparatus wherein selecting one of the services is also performed based upon a comparison of one or more quality of service characteristics or requirements of the services. (Chou et al: paragraph 25)

Consider **claims 5 and 17**, and **as applied to claims 1 and 13 above, respectively,** Chou et al, as modified by Toskala et al, disclose a method and apparatus wherein selecting one of the

services comprises receiving an input from a user or operator specifying the service. (Chou et al:

paragraph 8)

Consider **claims 6 and 18**, and **as applied to claims 1 and 13 above, respectively,** Chou

et al, as modified by Toskala et al, disclose a method and apparatus wherein periodically

calculating, for each of the services, a separate change to the current inner power loop

performance target (Toskala et al: col. 6, lines 35-41, figures 4a-4b); wherein performing a

comparison with respect to the different services comprises comparing the resulting respective

current inner power loop performance target changes (Toskala et al: col. 6, lines 45-50, figures

4a-4b); identifying the largest of the resulting respective current inner power loop performance

target changes (Toskala et al: col. 7, lines 29-35, figures 4a-4b); and changing the current inner

power loop performance target by the amount of the identified largest resulting respective

current inner power loop performance target changes to arrive at the inner loop power control

performance target being provided (Toskala et al: col. 7, lines 35-42, figures 4a-4b).

Consider **claims 7 and 19**, and **as applied to claims 1 and 13 above, respectively,** Chou

et al, as modified by Toskala et al, disclose a method and apparatus wherein periodically

calculating, for each of the services, a separate new inner loop power control performance target

value (Toskala et al: col. 6, lines 35-41, figures 4a-4b); wherein performing a comparison with

respect to the different services comprises comparing the resulting respective inner loop power

control performance target values (Toskala et al: col. 6, lines 45-50, figures 4a-4b); identifying

the highest inner loop power control performance target value from among the resulting

respective inner loop power control performance target values (Toskala et al: col. 7, lines 29-35,

figures 4a-4b); and using the identified highest inner loop power control performance target

value as the inner loop power control performance target being provided (Toskala et al: col. 7,

lines 35-42, figures 4a-4b).

Consider **claims 8 and 20**, and as **applied to claims 7 and 19 above, respectively,** Chou

et al, as modified by Toskala et al, disclose a method and apparatus wherein determining that one

of the resulting respective inner loop power control performance target values differs from the

resulting respective inner loop power control performance target value of one or more of the

other services by more than a predetermined threshold for more than a predetermined time;

responsive thereto, adjusting rate matching parameters of one or more of the services to bring the

differing respective inner loop power control performance target value closer to the resulting

respective inner loop power control performance target values of the one or more other services

(Toskala et al: figures 4a-4b, col. 6, line 26 to col. 7, line 42).

Consider **claims 9 and 21**, and as **applied to claims 7 and 13 above, respectively,** Chou

et al, as modified by Toskala et al, disclose a method and apparatus wherein the inner loop power

control performance target also includes a signal to interference ratio, SIR, target. (Toskala et al:

figures 4a-4b, col. 6, lines 8-12)

Consider **claim 10**, and **as applied to claim 1 above**, Chou et al, as modified by Toskala et al, disclose a method wherein radio communication system is a cellular radio communications system. (Toskala et al: col. 3, lines 1-18)

Consider **claim 11**, and **as applied to claim 1 above**, Chou et al, as modified by Toskala et al, disclose a method wherein the cellular radio communications system is a UMTS system. (Toskala et al: col. 3, lines 1-18)

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Agin (US Patent Application Publication #2004/0082301 A1), wherein a device controls an outer loop for controlling the adjustment of a primary target value (SIRc) of an inner power control loop in a multiservice telecommunications installation. The external control loop feeds the inner loop with the primary target value (SIRc) corresponding to a service. The device includes control means adapted, if there are at least two different services in the installation, to select one service dynamically and as a function of a selected criterion so that the outer loop can determine a primary target value (SIRc) corresponding to the selected service.

Any response to this Office Action should be **faxed to** (571) 273-8300 **or mailed to**:

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P.O. Box 1450
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**Hand-delivered responses** should be brought to

> Customer Service Window
> Randolph Building
> 401 Dulany Street
> Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Bobbak Safaipour whose telephone number is (571) 270-1092. The Examiner can normally be reached on Monday-Friday from 9:00am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Edan Orgad can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.
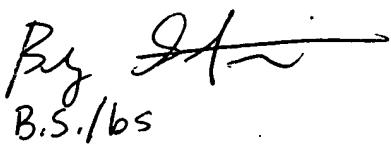
B.S./bs

March 19, 2007

EDAN ORGAD
PRIMARY PATENT EXAMINER

3/19/07